

WHAT IS CLAIMED IS:

1. In a system for constructing a three-dimensional object by selective attachment of a plurality of sheets of flexible material, each sheet being cut along at least one contour line so as to subdivide the sheet into at least one object forming region corresponding to the shape of a layer of the object bounded by a corresponding contour of the object and at least one residue region not required in the constructed object, at least part of each object forming region being attached to object forming regions of adjacent layers,

a method for facilitating the removal of the residue regions comprising producing selective attachment of at least part of a plurality of the residue regions to the residue regions of adjacent sheets in such a manner as to form, from at least part of the residue regions of a plurality of the sheets, a plurality of residue elements non-rigidly interconnected such that manual removal of each of said residue elements initiates removal of a subsequent one of said residue elements.

2. The method of claim 1, further comprising selectively cutting a plurality of the residue regions of at least some of the sheets along at least one separation line.

3. The method of claim 2, wherein said separation lines and said selective attachment are configured such that said residue elements

circumscribe a residue block such that, after removal of said residue elements, said residue block is readily removable.

4. The method of claim 1, wherein each one of at least a first group of said residue elements assumes a generally flat form extending substantially parallel to the sheets.

5. The method of claim 4, wherein said selective attachment is configured such that each one of said first group of residue elements is formed from a plurality of the residue regions attached to each other over a major part of their area.

6. The method of claim 4, wherein said selective attachment is configured such that said first group of residue elements are interconnected in a generally Z-fold arrangement.

7. The method of claim 4, wherein said selective attachment is configured such that adjacent ones of said first group of residue elements are interconnected over no more than a third of their area of overlap.

8. The method of claim 4, further comprising selectively cutting a plurality of the residue regions of at least some of the sheets along at least one separation line, and wherein one of said first group of residue elements has a maximum dimension L as measured parallel to the sheets, said residue element

being subdivided by said separation lines into at least one strip, said strip having a maximum transverse dimension W no more than a third of said maximum dimension L.

9. The method of claim 8, wherein said strip follows a generally spiral pattern.

10. The method of claim 8, wherein said strip follows a reciprocating scanning pattern.

11. The method of claim 1, further comprising selectively cutting a plurality of the residue regions of at least some of the sheets along at least one separation line, and wherein each one of at least a second group of said residue elements assumes a generally flat form extending substantially perpendicular to the sheets.

12. The method of claim 11, wherein said selective attachment is configured such that said second group of residue elements are interconnected in a generally Z-fold arrangement.

13. The method of claim 11, wherein said selective attachment is configured such that adjacent ones of said second group of residue elements are interconnected over no more than a third of their area of overlap.

14. The method of claim 11, wherein one of said second group of residue elements has a maximum dimension L as measured parallel to said residue element, said residue element being subdivided into at least one strip, said strip having a maximum transverse dimension W no more than a third of said maximum dimension L.

15. The method of claim 14, wherein said strip follows a generally spiral pattern.

16. The method of claim 14, wherein said strip follows a rectangular scanning pattern.

17. The method of claim 1 where at least part of the residue regions are within a side-opening of the object, the method further comprising selectively cutting a plurality of the residue regions of at least some of the sheets along at least one separation line, wherein said separation lines and said selective attachment are configured in such a manner as to form from at least part of the residue regions of a plurality of the sheets adjacent to the side opening a handle attached to a plurality of said residue portions which lie within the side opening, said handle being exposed by removal of other portions of the residue regions adjacent to the side opening so as to be readily accessible for facilitating removal of the residue portions from within the side opening.

18. In a system for constructing a three-dimensional object by selective attachment of a plurality of sheets of flexible material, each sheet being cut along at least one contour line so as to subdivide the sheet into at least one object forming region corresponding to the shape of a layer of the object bounded by a corresponding contour of the object and at least one residue region not required in the constructed object, at least part of each object forming region being attached to object forming regions of adjacent layers,

a method for facilitating the removal of the residue regions comprising:

- (a) selectively cutting a plurality of the residue regions of at least some of the sheets along at least one separation line; and
- (b) producing selective attachment of at least part of a plurality of the residue regions to the residue regions of adjacent sheets,

said separation lines and said selective attachment being configured in such a manner as to form, from at least part of the residue regions of a plurality of the sheets, a plurality of residue elements non-rigidly interconnected such that manual removal of each of said residue elements initiates removal of a subsequent one of said residue elements.

19. The method of claim 18, wherein said separation lines and said selective attachment are configured such that said residue elements circumscribe a residue block such that, after removal of said residue elements, said residue block is readily removable.

20. In a system for constructing a three-dimensional object by selective attachment of a plurality of sheets of flexible material, each sheet being cut along at least one contour line so as to subdivide the sheet into at least one object forming region corresponding to the shape of a layer of the object bounded by a corresponding contour of the object and at least one residue region not required in the constructed object, at least part of each object forming region being attached to object forming regions of adjacent layers,

a method for facilitating the removal of the residue regions from a side-opening of the object comprising:

- (a) selectively cutting a plurality of the residue regions of at least some of the sheets along at least one separation line; and
- (b) producing selective attachment at least part of a plurality of the residue regions to the residue regions of adjacent sheets,

said separation lines and said selective attachment being configured in such a manner as to form from at least part of the residue regions of a plurality of the sheets adjacent to the side opening a handle attached to a plurality of said residue portions which lie within the side opening, said handle being exposed by removal of other portions of the residue regions adjacent to the side opening so as to be readily accessible for facilitating removal of the residue portions from within the side opening.